

**SYSTEMS, METHODS AND COMPUTER PROGRAM PRODUCTS
FOR CONSTRUCTING SAMPLING PLANS FOR ITEMS
THAT ARE MANUFACTURED**

Related Applications

This application is a divisional of pending Application No. 09/397,357 filed on September 15, 1999. **PAT 6,636,818**

Field of the Invention

5 This invention relates to data processing systems, methods and computer program products, and more particularly to statistical systems, methods and computer program products.

Background of the Invention

10 Sampling plans are widely used in manufacturing environments in order to determine whether items are being manufactured at a desired quality level. In order to construct a sampling plan, the ANSI/ASQ Z1.9 standard generally is used. The ANSI/ASQ Z1.9 standard is a collection of sampling plans presented in tabular and graphical form. In order to construct a sampling plan, the ANSI/ASQ Z1.9 standard
15 is studied, and a sampling plan which best matches a desired sampling plan is selected.

 Unfortunately, in using the ANSI/ASQ Z1.9 standard, the user may be bound to those sampling plans that are set forth in the standard. In particular, specific values of error rates, power, sample size and other parameters may be forced upon a user
20 because the tables may not include the exact criteria that are desired by a given user.

 Moreover, because the ANSI/ASQ Z1.9 standard uses test procedures that are based on a non-central t distribution, it may be difficult for the user to interpolate or extrapolate between tables of the standard. Notwithstanding these difficulties, the ANSI/ASQ Z1.9 standard continues to be widely used in constructing sampling plans
25 for items that are manufactured.

Summary of the Invention

 It is therefore an object of the present invention to provide improved systems, methods and computer program products for constructing sampling plans for items
30 that are manufactured.